ABSTRACT OF THE DISCLOSURE

A disk array control apparatus includes a plurality of disk array control units for controlling data transfer between a plurality of host computers and a plurality of magnetic disk devices via a channel interface and a disk interface. The apparatus also includes an interconnection network for connection between shared memory portions in the plurality of disk array control units and an interconnection network for connection between cache memories in the disk array control units so as to transfer control information concerning data transfer between the host computers and cache memories and management information of the magnetic disk devices from one of the disk array control units to another of disk array control units. This enables to execute data processing while data transfer is performed from one of the disk array control units to another thereof.